

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-7 (canceled)

Claim 8 (withdrawn) An isolated nucleic acid encoding a GID polypeptide consisting essentially of an amino acid sequence selected from the group consisting of:

- (a) SEQ ID NO:2,
- (b) an amino acid sequence of a fragment of (a), wherein the fragment is biologically active, and
- (c) an amino acid sequence that is substantially homologous to (a) or (b), wherein the polypeptide is biologically active.

Claim 9 (withdrawn) The isolated nucleic acid of Claim 8 consisting essentially of the amino acid sequence of SEQ ID NO:2.

Claim 10 (withdrawn) The isolated nucleic acid of Claim 9 consisting of the nucleotide sequence of SEQ ID NO:1.

Claim 11 (withdrawn) The isolated nucleic acid of Claim 8 further comprising a heterologous nucleotide sequence.

Claim 12 (withdrawn) An expression vector comprising the nucleic acid of Claim 8.

Claim 13 (withdrawn) An expression vector comprising a nucleic acid that encodes a GID polypeptide, wherein the nucleic acid consists essentially of a nucleotide sequence selected from the group consisting of:

- (a) the nucleotide sequence of SEQ ID NO:1,
- (b) a fragment of the nucleotide sequence of (a) wherein the fragment of the nucleotide sequence encodes a polypeptide fragment that is biologically active, and
- (c) a nucleotide sequence that is substantially homologous to the nucleotide sequence of (a) or the fragment of the nucleotide sequence of (b), wherein the nucleotide sequence that is substantially homologous to the nucleotide sequence of (a) or the fragment of the nucleotide sequence of (b) encodes a polypeptide or a fragment of a polypeptide that is biologically active.

Claim 14 (withdrawn) The expression vector of Claim 13 that comprises a heterologous promoter operatively linked to the nucleic acid.

Claim 15 (withdrawn) A cell comprising the nucleic acid of Claim 11.

Claim 16 (withdrawn) The cell of Claim 15 that is a mammalian cell.

Claim 17 (withdrawn) A recombinant DNA molecule that comprises a heterologous promoter that is operatively linked to an expression control sequence; wherein the recombinant DNA molecule comprises the nucleic acid of Claim 8.

Claim 18 (withdrawn) A method of making a recombinant GID polypeptide comprising culturing a cell containing the nucleic acid of Claim 11 under conditions that provide for expression of recombinant GID polypeptide by the cell.

Claim 19 (withdrawn) The method of Claim 18 further comprising the step of purifying the recombinant GID polypeptide.

Claim 20 (canceled)

Claim 21 (withdrawn) An isolated nucleic acid encoding a fragment of a GID polypeptide comprising the decarboxylase domain that comprises the amino acid sequence of amino acids 216-395 of SEQ ID NO:2.

Claim 22 (withdrawn) The isolated nucleic acid of Claim 21 further comprising a heterologous nucleotide sequence.

Claim 23 (withdrawn) An isolated nucleic acid encoding a fragment of the GID polypeptide of Claim 2, wherein said fragment was obtained by cleaving the GID polypeptide with caspase-3.

Claim 24 (withdrawn) The isolated nucleic acid of Claim 23 further comprising a heterologous nucleotide sequence.

Claim 25 (withdrawn) An antibody to the GID polypeptide of Claim 1 or to an antigenic fragment of said GID polypeptide.

Claim 26 (withdrawn) The antibody of Claim 25, selected from the group consisting of a monoclonal antibody, a humanized antibody, a transgenic antibody, and a human antibody.

Claim 27 (withdrawn) A fragment of the antibody of Claim 26 that binds to the GID polypeptide.

Claim 28 (withdrawn) A cell line that produces the monoclonal antibody, the humanized antibody, the transgenic antibody, or the human antibody of Claim 26.

Claim 29 (currently amended): A solid support comprising a [[GID]] polypeptide of Claim 35 or a fragment thereof of ~~the GID polypeptide~~ capable of binding GNK and/or sGNK.

Claim 30 (withdrawn) A method of isolating GNK and/or sGNK from a sample that contains GNK or sGNK comprising:

- (a) passing the sample over the solid support of Claim 29 under conditions in which GNK and/or sGNK bind to the solid support;
- (b) washing the solid support; and
- (c) eluting the GNK and/or sGNK, wherein said GNK and/or sGNK are isolated from the sample.

Claim 31 (withdrawn) The method of Claim 30 wherein the sample is a mammalian tissue sample.

Claim 32 (withdrawn) A method of detecting caspase-3 activity in a sample comprising:

- (a) contacting the sample with the GID polypeptide of Claim 1; and
- (b) detecting whether the GID polypeptide is cleaved; wherein the sample is determined to contain caspase-3 activity when the GID polypeptide is cleaved

Claim 33 (withdrawn) The method of Claim 32 wherein the sample is a mammalian tissue sample.

Claim 34 (withdrawn) The method of Claim 32 wherein the cleavage of the GID polypeptide is detected using an antibody.

Claim 35 (previously added): An isolated polypeptide comprising an amino acid sequence that is at least 80% identical to the contiguous amino acid residues 216 through 395 of SEQ ID NO: 2, said polypeptide having a decarboxylase activity.

Claim 36 (previously added): An isolated polypeptide comprising an amino acid sequence that is at least 85% identical to the contiguous amino acid residues 216 through 395 of SEQ ID NO: 2, said polypeptide having a decarboxylase activity.

Claim 37 (previously added): An isolated polypeptide comprising an amino acid sequence that is at least 90% identical to the contiguous amino acid residues 216 through 395 of SEQ ID NO: 2, said polypeptide having a decarboxylase activity.

Claim 38 (previously added): An isolated polypeptide comprising an amino acid sequence that is at least 95% identical to the contiguous amino acid residues 216 through 395 of SEQ ID NO: 2, said polypeptide having a decarboxylase activity.

Claim 39 (previously added): An isolated polypeptide comprising an amino acid sequence of SEQ ID NO: 2, or a polypeptide fragment thereof, said polypeptide or polypeptide fragment having a decarboxylase activity.

Claim 40 (currently amended): An isolated polypeptide having a decarboxylase activity, wherein said polypeptide is encoded by a nucleic acid selected from the group consisting of:

- (a) a nucleic acid comprising nucleotides 646 through 1183 of SEQ ID NO: 1;
- (b) a nucleic acid capable of hybridizing to (a) under ~~moderately stringent~~ hybridization conditions comprising 40% formamide and 5x SSC; and
- (c) a nucleic acid that, due to degeneracy of the genetic code, encodes a polypeptide encoded by (a) or (b).

Claim 41 (previously added): The isolated polypeptide of Claim 40 which is capable of binding to GNK and/or sGNK.

Claim 42 (currently amended): The isolated polypeptide of Claim 40 which ~~is not cleavable by~~ lacks a caspase-3 cleavage site.

Claim 43 (currently amended): The isolated polypeptide of Claim 42, which has at least one amino acid change in any of the amino acid residues 581 through 584 of SEQ ID NO: 2.

Claim 44 (previously added): The isolated polypeptide of Claim 35, wherein said polypeptide is reactive to an antibody that binds specifically to an GID polypeptide comprising the amino acid sequence of SEQ ID NO: 2.

Claim 45 (previously added): A fusion polypeptide comprising the polypeptide of Claim 35, said fusion polypeptide having a decarboxylase activity.